Introduction

The North Fork Unit and Field are located on the southern Kenai Peninsula near the southeastern margin of the upper Cook Inlet Basin about 10 miles north northwest of Homer, Alaska. The North Fork field was discovered in 1965 by Standard Oil Company of California with the drilling of the North Fork Unit #41-35. The well tested gas from two zones within the Tyonek Formation but was shut-in. The field lay fallow until 2007 when Armstrong Cook Inlet, LLC (ACI) acquired the North Fork Unit. Since acquiring the Unit ACI has reentered the NFU #41-35, drilled three new wells, acquired a 3D seismic survey over the field, built a twelve mile gas pipeline and negotiated a gas contract with Enstar. Currently there are four producing Tyonek gas wells within the North Fork Field.

The upper Cook Inlet Basin is a northeast-southwest trending forearc basin bounded on the northwest by the Bruin Bay and Castle Mountain faults and on the southeast by the Border Ranges fault. The basin forms an elongate topographic depression between the Alaska Range to the northwest and the Kenai Range to the southeast and is filled with up to 25,000' of predominately non-marine, clastic sediments.

Oil and gas exploration within the upper Cook Inlet Basin began in the late 1950's and continued through the early 1970's. The initial exploration effort was focused on oil in the deeper Hemlock Formation, however, gas-charged sands were often encountered in the younger Sterling, Beluga and Tyonek Formations. Until recently a lack of pipeline infrastructure precluded development of gas fields south of the town of Kenai. All of the oil and gas accumulations discovered to date within the basin occur along prominent structural anticlines that trend roughly parallel to the basin axis.

Geological and Engineering Characteristics of the Reservoir

Up to 25,000' of non-marine Tertiary sediments were deposited within the upper Cook Inlet Basin (Fig. 1). The Tertiary sedimentary package thins abruptly toward the steeply northwest-dipping basin-bounding faults. To date gas production within the North Fork Unit has been established from several lenticular sands within the Tyonek Formation. Oil

shows have been noted from the deeper Hemlock Conglomerate and gas shows from the shallower Beluga Formation.

The Hemlock Conglomerate is comprised of up to 900' of non-marine sandstone, conglomeratic sandstone and conglomerate. The Hemlock produces oil and associated gas sourced from marine shales of Middle Jurassic and Late Triassic age, and is the most prolific oil producer in the Cook Inlet Basin. One well in the North Fork Unit, the NFU #41-35 tested minor amounts of oil from the Hemlock, but subsequent wells drilled within the Unit have not encountered significant Hemlock reservoir presence.

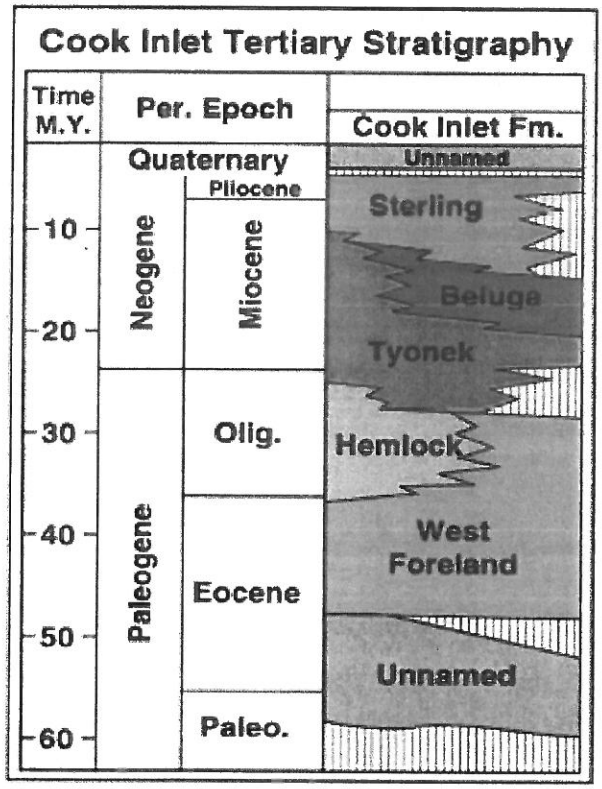

Figure 1. Generalized stratigraphic column for the upper Cook Inlet basin (McGowen and Doherty, 1992).

The late Oligocene - Miocene Tyonek Formation consists of up to 9000' of inter-bedded non-marine sandstones, conglomerates, siltstones, mudstones and coal. Twenty five percent of the discovered gas reserves in the Cook Inlet have been attributed to Tyonek reservoirs. The coals within the Tyonek and overlying Beluga formations are the source of the biogenic dry gas produced throughout the Cook Inlet. Sands within the Tyonek are generally fining-upward fluvial deposits with limited lateral extent. Tyonek fields tend to produce from numerous sands that are typically present in multiple wells within an

individual field, but do not extend to adjacent fields. Within the North Fork Unit six separate Tyonek sands have produced gas with two additional sands indicating behind-pipe pay based on shows and log calculations. The productive Tyonek zones have been informally named after the approximate depth that they are encountered, ie, Tyonek '8500 sand' (see attached cross sections).

The Miocene Beluga Formation is composed of non-marine siltstones, channelized sandstones, tuff, and thin discontinuous coals. Coals and sands of the Beluga Formation are a major source and reservoir for biogenic gas throughout the Cook Inlet Basin. Like the underlying Tyonek Formation, individual Beluga sands tend to produce from multiple wells within a field, but generally do not extend to adjacent fields. Gas shows have been encountered in wells drilled within the North Fork Unit, but none of the wells have tested gas from the Beluga.

The Beluga Formation is unconformably overlain by approximately 1,500' of Sterling sandstone and shale in the North Fork Unit. The Sterling Formation is a prolific gas producer in the basin, but is not prospective within the North Fork Unit due to a lack of seal capacity at shallow burial depth.

The Tertiary structural evolution of the Cook Inlet basin has been dominated by subsidence within a tectonically active forearc basin. Periodic uplift and erosion occurred near the margins of the basin in response to deformation along the basin-bounding faults, but the formation of large structures within the basin did not occur until Late Pliocene – Pleistocene time. Plio-Pleistocene deformation resulted in the formation of north-northeast trending asymmetric faulted anticlines. These structures tend to be tightly folded along the northwest margin of the basin and more gently folded along the southeastern margin. Most of the discovered oil and gas accumulations within the Cook Inlet are trapped by Plio-Pleistocene structures.

A series of en echelon north-northeast trending folds occur on the Kenai Peninsula between the towns of Kasilof and Homer. Dry gas accumulations have been discovered on each of these anticlinal trends, including (from northwest to southeast) Kasilof, Ninilchik - Falls Creek, Deep Creek - Happy Valley, and Nikolaevsk - North Fork. The

North Fork Unit is located within the largest four-way anticlinal closure on the Nikolaevsk - North Fork structural trend. Reflection seismic data and dip-meter analyses indicate the NFU #41-35 is near the crest of a north-northeast trending faulted anticline. Approximately 3,000 acres of fault-independent closure occur at the mid-Tyonek level. Structure maps for each of the productive and indicated productive Tyonek zones are attached. Other four-way closures occur along the North Fork anticlinal trend, but are isolated from the North Fork closure by small cross-faults and changes in plunge on the fold axis.

Isopachs for the individual Tyonek sands were not attempted due to the extremely lenticular nature of the sands and the unpredictability of sand distribution. For these reasons also, the outlines for the proposed Unit expansion and proposed Participating Area are based on structure mapping. The proposed Unit expansion area includes all ¼ sections that are cut by the composite of the area of closure for each productive and interpreted to be productive sand. The proposed Participating Area outline includes all ¼ sections that are cut by the composite outline of the lowest known gas elevation for each productive and interpreted to be productive sand.

Prior Exploration and Development Activities

According to records provided to the State of Alaska by the United States Bureau of Land Management, the North Fork Unit was originally formed in May, 1965 under the administration of the BLM and covered about 58,113 acres. Standard Oil Company of California (SOCAL) drilled the North Fork Unit #41-35 in late 1965 and reached TD within Mesozoic rocks at 12,812' MD. Numerous mud log and sample shows were encountered from a depth of 1,100' MD to the base of the Tertiary section. A DST of the Hemlock Formation recovered 215' of oil which was deemed non-commercial at the time and the well was plugged back to the Tyonek Formation. Two gas-charged sandstones within a sand-rich interval of the middle Tyonek formation were perforated in the NFU #41-35. Perforations at 8,005'-8,045' (Tyonek '8000 sand') and 8,563'-8,602' (Tyonek '8500 sand') tested dry gas at stabilized rates of 6,720 MCFD and 1,770 MCFD, respectively. A bridge plug was set between the two zones and the well was shut-in. Following the drilling of the NFU #41-35, in November, 1966 a 640-acre Gas Pool #1

was approved around the well. Cores were not taken in the Tyonek interval, but detailed log analysis indicates approximately 76 feet of gas pay in the two perforated intervals. The tested reservoirs average 14% porosity and 40% water saturation with a pressure buildup analysis of the upper pay zone indicating an effective permeability between 2 and 3 mD. In late 2010 Armstrong Cook Inlet, LLC reentered the NFU #41-35, drilled out the bridge plug and reperforated the Tyonek '8000 sand' and the Tyonek '8500 sand'. The Tyonek '8000 sand' was tested at a rate of 4,079 mmcfgpd and the Tyonek '8500 sand' flowed 6,100 mcfgpd. The well was then prepared for production and shut-in pending completion of the gas pipeline.

In 1970 SOCAL drilled the North Fork Unit #11-4 about six miles northeast of the NFU #41-35. Numerous gas shows were encountered in the Beluga and Tyonek Formations, however, log calculations do not indicate any reservoir quality sands. The Hemlock zone tested in the NFU #41-35 was not present and the well was plugged with no tests run. The North Fork Unit then contracted to the 640-acre Gas Pool #1 in January, 1971.

After the drilling of the NFU #11-4 several changes of ownership of the Unit occurred but no activity was undertaken until Armstrong Cook Inlet, LLC (ACI) acquired the property in September, 2007. Since ACI acquired the field three new wells have been drilled and a work-over of the NFU #41-35 has been completed. An approximately twelve mile pipeline has been constructed connecting the Unit to the Kenai Kachemak Pipeline to the north and a gas contract has been negotiated with Enstar allowing for gas sales. ACI also acquired a new proprietary 3D covering 19.59 sq. miles over the Unit and surrounding area. The well test and information for the wells drilled or worked over by ACI is summarized in Table 1. All of the wells are currently producing gas, however, the NFU #14-25 produces intermittently (see attached production plots). Shallower zones that are interpreted to be productive based on log analysis and shows will be added at a later date as the pressure of the deeper producing zones depletes to an equivalent of the shallow zone. In addition there are numerous zones in the Tyonek and the Beluga that are poorer quality based on log analysis and shows that may be tested in the future.